

**REMARKS**

Claims 2–27 and 30–32 are currently pending in the subject application, and are presently under consideration. Claims 1, 2, 10, 16, 21, 23, 24, 26, 28 – 30 and 32 – 34 stand rejected. Claims 3 – 9, 11 – 15, 17 – 20, 22, 25, 27, 31 are objected to as being dependent from a rejected base claim, but would be allowable if rewritten in independent form. Claims 1, 28, 29, 33 and 34 have been cancelled. Claims 2, 12 and 30 have been amended by rewriting such claims into independent form.

Favorable reconsideration and allowance of the subject application are respectfully requested in view of the comments and amendments herein.

**I. Provisional Double Patenting Rejection**

To facilitate allowance of the subject application, submitted herewith is a Terminal Disclaimer for the subject application and co-pending Application No. 10,646,935. Withdrawal of the provisional double patenting rejection is respectfully requested. Applicant also requests notification that claims 2 and 10 are allowed.

**II. Claims 1, 28 – 30, and 32 - 34 stand rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 5,507,456 to Brown.**

Claims 1, 28 – 30, and 32 - 34 stand rejected under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 5,507,456 to Brown (“Brown”). Withdrawal of this rejection is respectfully requested for at least the following reasons.

Claims 1, 28, 29 and 33-34 have been cancelled such that the rejection of these claims in view of Brown is moot.

Claim 30 has been rewritten into independent form, including claims 28 and 29 from which it originally depended. Claim 30 recites additional means for providing the output signal at an intermediate level that self-biases between the normal high and low levels according to process variations in the system. Claim 30 has been identified as being anticipated by Brown. However, the Office Action has failed to identify any teaching in Brown to support the rejection of claim 30. Applicants submit the failure to identify a teaching in Brown et al. is because Brown et al. is silent as to any structure capable of operating in a manner recited in claim 30. Since Brown fails to teach the system of claim 30 and because the Office Action has failed to establish a prima facie case of unpatentability of

claim 30, claim 30 should be allowed. Additionally, if the Office provides new grounds to support rejection of claim 30, after failing to do so in its final Office Action dated April 19, 2005, then the finality of the Office Action should be withdrawn in view of such new grounds for rejection to afford the Applicant the opportunity to refute the rejection.

Reconsideration and allowance of claim 30 are respectfully requested.

### **III. Rejection of Claims 16, 21, 23 and 24 Under 35 U.S.C. §102(b)**

Claims 16, 21, 23, and 24 stand rejected under 35 U.S.C. §102(b) as being anticipated by Mizokawa, U.S. Patent No. 4,170,715 ("Mizokawa"). Withdrawal of this rejection is respectfully requested for at least the following reasons.

Applicant respectfully traverses the rejection of claim 16 in view of Mizokawa. The Office Action contends that Mizokawa includes a waveform control that provides a control output at terminal "c". Office Action, at page 4, lines 6-7. The Office Action further alleges that elements 9 and 10, being an amplifier assembly, clearly qualifies as a driver. That is, the position in the Office Action at 4 is that the amplitude changer and transmitter 30, which provides the signal at "c," corresponds to the waveform control of claim 16 and that the receiving transformer 9 and amplifier and waveform-shaper circuit 10 correspond to the driver of claim 16.

In reply to Applicant's response of February 7, 2005, the Office Action (at page 6, lines 7-12) appears to focus on signals "c" and "d", whereas the output of the amplifier and waveform-shaper circuit 10 actually corresponds to output "e." Applicant agrees that signal "d" does not have constant amplitude. This is because, as shown and described with respect to FIG. 3, the signal "d" is not the output of the amplifier and waveform-shaper circuit 10, but instead corresponds to the signal received at the other end of the transmission path, indicated at 8. The transmission path 8 connects the amplitude changer and transmitter 30 with the receiving transformer 9. Moreover, the increased amplitude for the shorter pulse duration signal "c" is to compensate for attenuation of such signals through the transmission path 8 and to mitigate distortion in the signals. See Mizokawa, at Col. 3, lines 54-58, and at Col. 3, line 65, through Col. 4, line 8.

From FIG. 4, which depicts the relationship between signals "c" (from the amplitude changer and transmitter 30), "d" (the signal received via the transmission path 8), and "e" (the output of the amplifier and waveform-shaper circuit 10), it becomes clear that the output of the amplifier and waveform-shaper circuit 10 (i.e., signal "e") does not include an

intermediate level during a second operating mode. Instead, the output signal “e” exhibits a shorter pulse duration in certain “modes” but the signal alternates between fixed amplitude levels (*e.g.*, between high and low rails), regardless of the values of NRZ and SPM. Accordingly, Mizokawa fails to teach or suggest that the output signal (*i.e.*, signal “e”) from the amplifier and waveform-shaper circuit 10, which the Office Action contends corresponds to the driver of claim 16, is an output clock signal having normally high and low levels during a first operating mode and an intermediate level that is between the normally high and low levels during a second operating mode, as recited in claim 16

For these reasons, Applicant respectfully requests reconsideration and allowance of claim 16, as well as claims depending from claim 16.

Regarding claim 21, the Office Action contends that element 24 in Fig. 2 of Mizokawa forms a divider that controls the amplitude during the second operating mode. Claim 21 recites at least a portion of the waveform controller circuitry cooperates with at least a portion of the driver circuitry to form a voltage divider during the second operating mode. The Office Action contends that element 24 of Mizokawa forms a voltage divider. As described above, in rejecting claim 16, the Office Action, however, states that the amplitude changer and transmitter 30 (which includes element 24) corresponds to the waveform controller of claim 16. Since no portion of element 24 cooperates with a portion of the circuitry of circuit elements 9 and 10 to form a voltage divider, as recited in claim 21, claim 21 is not anticipated by Mizokawa. Accordingly, reconsideration and allowance of claim 21 are respectfully requested.

Claims 23 and 24 are allowable for at least the same reasons, as stated above with respect to claim 16. Additionally, with respect to claim 24, Applicants submit that no circuitry shown or disclosed in Mizokawa corresponds to a delay network that is capable of controlling a duration for which the output clock signal (provided by the driver of claim 16) is at the intermediate level during the second operating mode, as recited in claim 24. An element of the claim is not inherent in the disclosure of the prior art unless extrinsic evidence clearly shows that the missing descriptive matter is necessarily present in the thing described in the reference, and inherency may not be established by mere probability or possibilities. See, *e.g.*, *In re Robertson*, 49 U.S.P.Q.2d 1949 (Fed. Cir. 1999). There is nothing disclosed in Mizokawa that would require the circuitry of Mizokawa to include a delay network that controls the duration for which the output clock signal is at the intermediate level during the second operating mode, as recited in claim 24. Instead, the duration of the signal pulse at the

intermediate level depends on the relationship of the NRZ and SPM signals. The conclusion, based on inherency in the Office Action, thus appears based on speculation, which is insufficient to establish anticipation under 35 U.S.C. §102. For the reasons stated above, reconsideration and allowance of claim 24 is respectfully requested.

**IV. Rejection of Claim(s) 26 Under 35 U.S.C. §103(a)**

Claim 26 stands rejected under 35 U.S.C. §103(a) as being unpatentable over Mizokawa, U.S. Patent No. 4,170,715 (“Mizokawa”). Withdrawal of this rejection is respectfully requested for at least the following reasons.

The Office Action fails to identify in its rejection any teaching or suggestion in Mizokawa of an integrated circuit that might include a clock generator and one or more other circuits that are driven by the output signal of the driver, as recited in claim 26. Instead, it is respectfully submitted that the system shown and disclosed in Mizokawa includes a transmission path 8 and transformer circuitry, which are usually not incorporated into an integrated circuit. The Office Action even admits that the system of Mizokawa is for use in repeating systems to enable the control output travel long distances. This type of use is contrary to the integrated circuit that is being claimed in claim 26. Applicant further submits that there is not proper motivation or teaching in Mizokawa to implement the amplitude changer and transmitter 30, the transmission path 8, the receiving transformer 9 and amplifier and waveform-shaper circuit 10 and other circuitry (not shown) in an integrated circuit as is being suggested in the Office Action. Thus, it appears that the Office Action may be relying on improper hindsight to arrive at the obviousness conclusion for claim 26. For example, when Mizokawa is considered in its entirety, what would be the motivation to provide an integrated circuit, as recited in claim 26? Accordingly, claim 26 should be allowed.

**V. Allowable Subject Matter**

Applicants appreciate the indication of allowable subject matter with respect to claims 3-9 and 11 - 15, 17, 18 - 20, 22, 25, 27 and 31.


**VI. CONCLUSION**

In view of the foregoing remarks, Applicant respectfully submits that the present application is in condition for allowance. Applicant respectfully requests reconsideration of this application and that the application be passed to issue.

Should the Examiner have any questions concerning this paper, the Examiner is invited and encouraged to contact Applicant's undersigned attorney at (216) 621-2234, Ext. 106.

No additional fees should be due for claim amendments in this response in view of the cancelled claims. In the event any fees are due in connection with the filing of this document, the Commissioner is authorized to charge those fees to Deposit Account No. 08-2025.

Respectfully submitted,

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